enabling Excellence



KY EXCEL Highlights

October 8, 2012



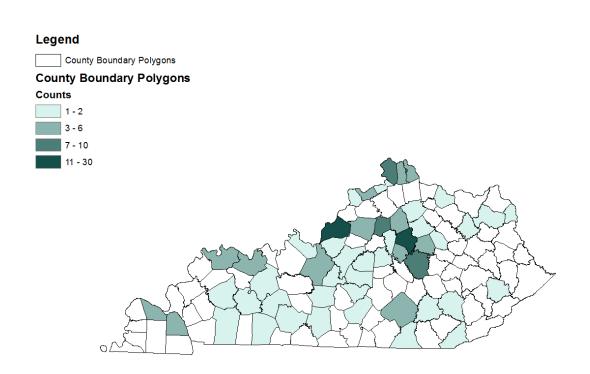
Membership

Currently, there are 182 active members.

- Master (44)
- Leader (30)
- Partner (35)
- Advocate (73)

You have committed to complete almost 2,000 projects.

KY EXCEL Member Map





Member Investments

Hours Spent 946,357

Dollars Spent \$113,196,343

People Involved 61,283



Member Results

- 37,341,194 pounds of paper recycled
- 2,057,308 pounds of aluminum recycled
- 3,822,523 pounds of plastic recycled
- 25,194,076 kWh electricity conserved
- 93,929,525 mmBtu natural gas conserved
- 144,840,177 gallons of water conserved
- \$126,530 dollars donated
- 56,255 people trained
- \$37,093,545 dollars saved



Coming Trends In Recycling

- Regulations preventing food waste going to landfills (Composting)
- E-scrap
- Regulations preventing non-compostable and non-recyclable containers
- Waste to energy plants
- Ann Arbor spent \$71 per ton on recycling and composting, compared to \$86 per ton for trash collection and disposal



Composting

- Yard trimmings and food ~ 27% of waste stream
- Enriches soil
- Helps clean contaminated soil
- Prevents pollution
- Economic benefits (reduces need for water, fertilizer and pesticides)



E-Scrap Recycling

Why recycle E-scrap?

- U.S. generates 3 million tons/year (50 million tons worldwide)
- E-scrap estimated to increase 500% in next 10 years
- Estimated that 70% of heavy metals in landfill from electronics
- E-scrap contains hazardous, valuable & scarce materials.
- Up to 60 elements in electronics



Electronics

- Substances found in large quantities include <u>epoxy resins</u>, <u>fiberglass</u>, <u>PCBs</u>, <u>PVC</u>, <u>thermosetting plastics</u>, <u>lead</u>, <u>tin</u>, <u>copper</u>, <u>silicon</u>, <u>beryllium</u>, <u>carbon</u>, <u>iron</u> and <u>aluminium</u>.
- Elements found in small amounts include <u>cadmium</u>, <u>mercury</u>, and <u>thallium</u>.
- Elements found in trace amounts include <u>americium</u>, <u>antimony</u>, <u>arsenic</u>, <u>barium</u>, <u>bismuth</u>, <u>boron</u>, <u>cobalt</u>, <u>europium</u>, <u>gallium</u>, <u>germanium</u>, <u>gold</u>, <u>indium</u>, <u>lithium</u>, <u>manganese</u>, <u>nickel</u>, <u>niobium</u>, <u>palladium</u>, <u>platinum</u>, <u>rhodium</u>, <u>ruthenium</u>, <u>selenium</u>, <u>silver</u>, <u>tantalum</u>, <u>terbium</u>, <u>thorium</u>, <u>titanium</u>, <u>vanadium</u>, and <u>yttrium</u>.
- Almost all electronics contain lead and tin (as solder) and copper
- Please choose a responsible recycler



















Health Impacts

- 88% of children suffering from lead poisoning
- Higher-than-average rates of miscarriage
- Burn wires and other plastics to liberate metals such as copper
- Use highly corrosive and dangerous acid baths along the riverbanks to extract gold from the microchips
- Children are exposed to the dioxin-laden ash
- The soil has been saturated with lead, chromium, tin, and other heavy metals
- Discarded electronics lie in pools of toxins that leach into the groundwater, making it so polluted that the water is undrinkable
- Lead in the blood of children is 54% higher on average than that of children nearby
- Heavy metal concentrations found that lead and copper were 371 and 115 times higher, respectively, than areas located 30 kilometers away



Collaboration

KY EXCEL and the Brownfield program worked together with the City of Russellville on their new fire station



Russellville



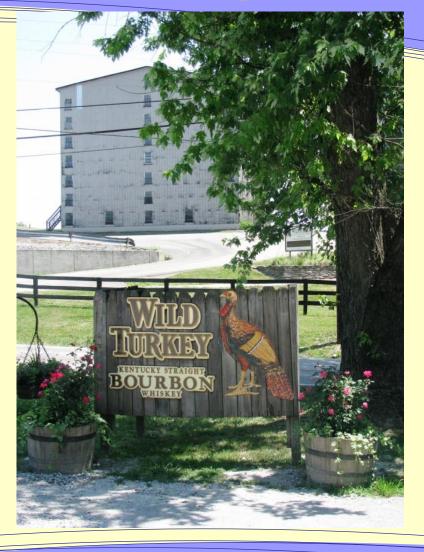


Russellville





Sustainable Spirits Summit





Sustainable Spirits Summit





Sustainable Spirits Summit





Sustainable Sporting Events





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Coming Next Year

Green grocery training









Contact Information

 If you have questions or want more information about the KY EXCEL program, contact John Eisiminger at 800-926-8111 or john.eisiminger@ky.gov.

